

STUDENTS' DIGITAL READING COMPREHENSION CHALLENGES ON ACADEMIC TEXT

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ABSTRACT

This research aims to explore the challenges of digital reading comprehension on academic text faced by third-semester students at Jambi University. In conducting this research, the researcher used descriptive qualitative methods. Five participants participated in this research and met the criteria desired by the researcher, such as active third-semester students, students who had completed reading for academic purposes courses, and students who were willing to be involved in this research. The researcher used semi-structured interviews as an instrument in data collection. The data is then processed through three stages, namely, data reduction, data display, and drawing conclusions or verification. The final results reveal that there are two categories in the challenges of digital reading comprehension on academic text. The first category is technology issues which include low reading interest, eye strain, internet connection, concentration, and too much information. Meanwhile, the second category is academic reading comprehension challenges which include vocabulary, complex sentences, and unfamiliar topics. In conclusion, students face challenges in digital reading comprehension on academic texts, especially in aspects technology and comprehension.

Keywords: *Academic Reading challenges, Reading comprehension, Digital media.*

INTRODUCTION

Reading is one of the skills in English subject. Reading English is an important part of language learning as it helps students develop other related skills such as grammar, vocabulary, and writing. Not only in the learning process, reading is needed in various aspects of life. Reading is often considered a boring activity, so innovative strategies are needed to increase students' interest in reading. The development of the times and technology makes reading also experience changes. If previously reading was only through sheets of text, now reading is switching to digital form. So, today many people have used digital technology as a media to read. This reading activity is also known as digital reading.

According to Nordquist in research from Lim F.V. & Toh, W. (2020), digital reading is defined as the activity of information from texts presented via digital devices such as

computers, tablets, smartphones and e-readers. The digital reading process often involves the consumption of multimodal texts, which include a combination of images, videos, and other media elements in addition to verbal language in a text (Buccellati, 2008). This type of digital multimodal text can include e-books, interactions in social media, and articles published on the website. The use of digital reading materials is very widespread, and students can easily access them via their smartphone devices. This can be an effective means of improving students' reading comprehension abilities.

Digital reading is part of English as a foreign language students' academic activity in this digital era. Accessing reading material through digital media online is indeed easier, more practical, faster, more effective, and efficient. Almost any type of reading material can be obtained according to readers wishes in a matter of minutes or even seconds. Besides that, digital reading activities can be done anytime and anywhere. Digital reading does bring many benefits to students. Especially in meeting educational needs such as finding learning materials and lectures in the form of e-books, scientific journals, and others. But behind these many advantages, there are still many students who find challenges and difficulties in digital reading.

In the context of research on digital reading, there are challenges that readers face when interacting with text via a screen, such as difficulties in switching between browsers and challenges in maintaining focused attention. On the other hand, readers develop special strategies when carrying out digital reading activities, such as searching with keywords. Therefore, understanding how students engage in bold reading for academic purposes is significant, as well as exploring how they overcome obstacles that arise in the bold reading process.

There are several studies related to the difficulties in students' reading comprehension. Nindya (2021) researched to find out the challenges faced by English learners when reading in an online environment. The results of the study indicate that students do face some problems when reading in an online environment. In addition, Yolanda (2019) conducted research on students' difficulties in understanding English reading texts.

Previous studies have addressed the same issue, but before delving into the topic, it is very important to identify the research gap. After reviewing the existing literature, it becomes clear that most of the studies focused on digital reading in general, without a

specific focus on reading comprehension of academic texts. As a result, this study aims to explore more deeply the challenges students face in digital reading comprehension on academic text. This research seeks to answer the following question: 1) What challenges do the students have in digital reading comprehension on academic text?

METHODS

In this research, researchers used a qualitative descriptive research design. Creswell (2012) states that qualitative research is used to investigate a problem with the aim of understanding a particular phenomenon. A qualitative descriptive research design was chosen because this research focuses on certain phenomena in the context of the digital era. The case of this research is the activities in digital reading, especially on academic reading text.

For the research location and subject, this research was conducted in the English study program at Universitas Jambi and the subjects were five third-semester students of English education study program in class R001 at Universitas Jambi. In selecting participants, there are several criteria that need to be considered: 1. Active students, 2. Students who have completed reading courses for academic purposes, 3. Students who are willing to interact in this research and give participant consent to the questionnaire that has been distributed. The researcher only took five participants, in line with Creswell (2007) who states that the number of participants in qualitative research is usually 5 to 10 participants. Apart from that, the reason the researcher chose 5 participants was to deepen the information provided by the participants. So the data obtained is more detailed.

In this study, the researcher collected the data through interviews. The interview technique in this research was applied using a semi-structured method. Sugiyono (2016) explains that semi-structured interviews provide more freedom in their implementation compared to structured interviews. The interview protocol was designed by taking into account the theories explained in chapter two and adaptation instruments from several previous studies (Nindya, 2019, Yolanda, 2019, Estika, S., 2018; Badriyah et al. 2020; Rachmanita et al., 2022).

After completing data collection, the researcher then carried out data analysis. Before entering the data analysis stage, researchers made interview transcripts as a first step to simplify the analysis process. According to Miles and Huberman (1984), the data analysis

process involves three main activities: data reduction, data display, and conclusion drawing or verification.

RESULTS

The research findings consist of main points based on the research questions. The research question focused on exploring academic reading comprehension challenges using digital academic media.

Academic Reading Comprehension Challenges Using Digital Academic Media

According to the students who participated in this research, they emphasized that digital reading activities cannot be separated from the learning process. In the context of digital reading, they admitted that they faced several challenges in digital reading comprehension on academic text. The challenges of students' digital reading comprehension on academic text are divided into two categories, namely technological issues and academic reading comprehension.

Table 1: The result of interviews (simple calculation)

Category (N)	Theme/Topic (N,%)
Technological Issues (5 participants)	Low Reading Interest (4 participants, 80%)
	Eye Strains (5 participants, 100%)
	Internet Connection (4 participants, 80%)
	Concentration (5 participants, 100%)
	Feel bored (2 Participants, 40%)
	Too Much Information (4 participants, 80%)
	Paid Journal (2 Participants, 40%)
Academic Reading Comprehension Challenges (5 participants)	Vocabulary (4 participants, 80%)
	Grammar (1 Participants, 10%)
	Complex Sentence (4 participants, 80%)
	Unfamiliar Topic (4 participants, 80%)

Technological issues

From the results of data analysis, the first topic that emerged in the challenge of digital reading on academic text was technological issues. Technology issues cannot be separated

from digital reading activities. In the category of technological issues, the researcher revealed that there are five sub-topics, namely: low reading interest, eye strains, internet connection, concentration, and too much information.

1. Low reading interest

Based on the data obtained, the first challenge encountered was low reading interest. Reading interest can have a big influence on a person's reading comprehension. When someone has a high interest in the topic or material they are reading, they tend to be more focused and engaged in the reading process. In reality, students do not have a high reading interest in reading academic material. In a research interview, P3 stated:

"I'm not really interested in reading using digital media. I am more interested in reading through print media." (P3)

Based on interview data from participants, participants did not have a high reading interest in digital reading. Some students admitted that they were more interested in reading through print media.

2. Eye Strains

Eye strain is the most frequently felt challenge when reading using digital media. Five out of five interview participants admitted that they experienced eye strain when reading academic material using a smartphone. P1 stated:

"Usually, if I read using a smartphone for too long it makes my eyes hurt and strain" (P1)

This can be caused by several factors. In the interview results, P4 stated that:

"Sometimes it is very difficult to read on a small screen, starting from the font size to the screen brightness which is difficult to adjust." (P4)

Based on interviews, P1 stated that the challenge they faced was eye strain when reading for too long using a smartphone. Apart from that, P4 stated that the challenges they faced in eye strain were caused by the brightness of the smartphone screen light.

3. Internet connection

Internet connection is the most important part of accessing reading materials online. However, internet connection is still a common problem faced by students when reading digitally. This is in line with the statement from P1:

"I happen to live in Batanghari, an area that is not a city. So sometimes if there is a power outage the network is lost. There are also some internet cards that are not supported there. That becomes an obstacle when you want to access reading material on the internet." (P1)

Based on the statement, the challenge faced when reading digitally is an unstable internet connection. An unstable internet connection is usually caused by environmental factors where students live. Especially for participants who live in certain areas that are not cities.

4. Concentration

Academic reading certainly requires concentration to understand the content of the reading text. However, students often find it difficult to maintain concentration when reading academic material using a smartphone. One participant expressed P2:

"I often divert my attention. For example, if there is an interesting notification, I will be curious to open it. So you lose concentration when you're reading." (P2)

On the other hand, P5 stated:

"It may be difficult to focus because people now have little attention for reading". (P5)

Based on this data, notifications are the cause of difficulty concentrating when reading using a smartphone. Apart from that, not many people spend time playing on their smartphones to read because they are more interested in social media.

5. Too much information

Finding reading material on the internet is not easy. The more sources there are, the more students need to read. In the interview, P1 stated:

"Sometimes when we read reading material or reading material on the internet, there are lots of sources, we have to make sure whether it is true or not." (P1)

Based on this statement, participants experienced difficulty in choosing the correct information or source when reading digitally. This is caused by choosing inappropriate keywords in the search. Keyword misalignment will make search results difficult to find.

Academic Reading Comprehension Challenges

Based on interview data, academic reading using digital media not only provides challenges in aspects of technology issues but also aspects of students' reading comprehension. The researcher found three subtopics related to academic reading comprehension challenges, namely: vocabulary, complex sentences and unfamiliar topics.

1. Vocabulary

Vocabulary is an important aspect of reading comprehension of texts. However, Vocabulary is one of the most challenging aspects encountered by students. Limited vocabulary mastery makes students find it difficult to understand academic reading. One participant stated:

"Personally, for academic texts, I still lack mastery of vocabulary. Sometimes I have to find out the meaning, especially using Google Translate"
(P1)

Based on interview data, participants stated that the challenges they faced in vocabulary were due to their knowledge of academic vocabulary which was still limited and not yet understood. Academic texts tend to use more standard vocabulary. Students find it difficult to understand the reading text. Therefore, participants as EFL students certainly need a lot of knowledge about academic vocabulary to learn it.

2. Complex Sentences

Academic texts tend to use complex sentence structures and specialized vocabulary that can make comprehension more difficult for unfamiliar readers. P5 stated:

"Most academic texts use complex sentences. It's so complex that it's also difficult to interpret one by one. So the complexity exceeds the abilities I just learned" (P5)

The use of complex language makes students confused and do not know the meaning of the content of the reading text. This is because academic texts often use complicated sentence structures.

3. Unfamiliar Topics

In academic texts, there are many topics that have just been studied and sound foreign to students' ears. For this reason, students must make extra efforts to understand the contents of reading texts with unfamiliar material. In an interview, one of the P4 participants stated:

"Maybe at first in high school, I only studied general topics, whereas when I entered college I read a lot of texts with unfamiliar topics. Usually because the topic is unfamiliar it becomes more difficult to understand" (P4)

Academic reading comprehension can be considered to be more difficult when the topics discussed are unfamiliar to the reader. In this case, it could be due to previous educational background.

DISCUSSION

Technological Issues

Technology issues relate to the challenges faced by students in using digital media (smartphone) to support academic reading activities. Researcher revealed five challenges faced by students, namely: Low reading interest, eye strain, internet connection, concentration, and too much information.

Interest is a crucial thing for enjoying reading activities. Interest in reading is a deep tendency in a person's soul which is followed by feelings of pleasure and a strong desire to read without compulsion (Anjani et al., 2019). Four out of five participants admitted that they were not too interested in reading using digital media. The reason is that some students are more interested in reading through printed media. Using printed media for reading makes it easier to highlight important sentences and is also easy to understand. The results of this research are in line with research from Prihantini (2020). The findings show that one of the factors that might make students experience difficulty in understanding English reading texts is the lack of students' interest.

Apart from reading interest, another challenge that also arises is eye strain. Eye strain is a common problem often faced by students who do digital reading or use smartphones for long periods. Excessive screen use will result in a greater risk of obesity, vision problems, and can cause sleep disorders and decreased sleep quality (Domoff et al., 2019). This challenge arises because the font size is small and the brightness of the smartphone's

light makes the eyes uncomfortable if readers stare at the smartphone screen for too long. The results of this research are similar to research conducted by Nindya Juwita Utimadini (2021), that reading online provides challenges in the health aspect.

Then, the internet connection is a challenge often experienced by participants in accessing digital reading materials. According to Kenji Kitao in Munir (2008), the function of the internet is to access various references, both in the form of research results and articles from studies in various fields. Most participants stated that an unstable internet connection was the main challenge in accessing materials online. Internet connection instability is caused by environmental factors. The same as the discovery of Nindya Juwita Utimadini (2019), in her research, it was revealed that unsupportive facilities such as internet connection cause difficulties in digital reading.

Another important finding was concentration. Concentration is the biggest challenge in digital reading. Chen and Lin (2016) indicate that a small screen can affect reading performance because the screen limits transmission. Five out of five participants in interviews admitted that they had difficulty concentrating when reading using digital media. This is because interference often occurs from notifications that appear on the smartphone screen. This research is in line with the findings of Mardiah et al. (2021). The results of the study revealed that some students reading digital texts via smartphone had difficulty focusing on reading, and injured their eyes.

This research also found that the challenge in digital reading is too much information. This means that students receive too much information at the same time. Sin and Kim (2013) show that social networking sites are widely used for daily information searches, especially by young people and students. The cause of too much information is that the keywords entered are not correct. Based on interviews, three out of five participants admitted that the large number of reading sources was one of the challenges they experienced when looking for reading sources online. Because the large number of reading sources that appear in one click makes it difficult for students to choose relevant material.

Based on the results of interviews, participants also admitted that they preferred reading through print media because it was easier to highlight certain sentences. Even though print media is limited, it can be easier to understand. So, there is a tendency for students to have a better understanding of printed reading than digital reading. This is

supported by research conducted by Kharisma Alfiah et al. in 2021. The results of this study showed that most of the students felt relaxed when reading the printed books.

Academic Reading Comprehension Challenges

Based on the data obtained, digital reading also provides challenges in academic reading comprehension. The researcher revealed three challenges in the aspect of academic reading comprehension, namely: vocabulary, complex sentences, and unfamiliar topics.

The first challenge in academic reading comprehension was vocabulary. Individuals who learn a foreign language are constrained by their knowledge of grammar and vocabulary in the target language, so they have to work hard to understand the content (Nurjanah, 2018). Three out of five participants revealed that they experienced the challenge of lacking academic vocabulary. As stated by P1 in the interview, vocabulary is a challenge in understanding academic texts. This is in line with the findings of Badriyah et al. (2020), which revealed that lack of vocabulary is a problem for students in reading and understanding English texts.

Then, the challenge in academic reading comprehension is complex sentences. According to Souriyavongsa et al. (2013), surface-level features such as important syntactic or lexical elements influence reading ability. This means that sentence structure can influence students' ability to understand the meaning of sentences. Three out of five participants expressed the opinion that complex and long sentences were a challenge in understanding academic texts. This statement is similar to the results of research conducted by Satriani (2018), the research conducted research on Reading Comprehension Difficulties Encountered by English Students of Riau Islamic University.

Another challenge experienced by students in academic reading comprehension is unfamiliar topics. "Unfamiliar topic" is a term used to refer to a topic or subject that is unknown to someone. This may include topics that are new or have not been studied before. Reading topics that are unfamiliar to readers will be more difficult to understand. The cause is educational background as well as a lack of basic knowledge and limited vocabulary. According to Omagio (Somadayo, 2011), reading comprehension ability is

influenced by a combination of language knowledge, cognitive style, and reading experience.

Table 2: Final result of the research

Category	Topic
Technological Issues	Low Reading Interest
	Eye Strains
	Internet Connection
	Concentration
	Too Much Information
Academic Reading Comprehension Challenges	Vocabulary
	Complex Sentence
	Unfamiliar Topic

CONCLUSION

The results of this study indicate that students experience several challenges in reading comprehension of academic digital texts. Based on the data collected, there are two categories, namely technology problems and academic reading comprehension challenges. In the technology problems category, there are five factors that challenge students when reading using digital media, namely, low reading interest, eye strain, internet connection, concentration, and too much information. Meanwhile, in the academic reading comprehension challenge category, there are three main factors that become challenges for students which include vocabulary, complex sentences, and single topics. For further research, it is hoped that this research can become a reference in conducting research on similar topics. However, because this research is qualitative in nature and only uses interview instruments, it is recommended for future researchers to use a different research method (quantitative). In addition, researchers should also consider using instruments that involve more respondents, such as questionnaires, so that findings can be more easily generalized.

REFERENCES

- Almendo, T. (2020). Challenging efl students to read: digital reader response tasks to foster learner. *Teaching English with Technology*, 21-41.
- Badriyah., Tarihoran, N., & Rahmawati, E. (2020). Students' problems of reading comprehension during online learning in the period of covid-19 pandemic. *Proceedings of the 2nd International Conference on English Language Education (ICONELE) 2020*, 286-298.

- Buccellati, G. (2008). Digital text. In: Digital thought (chapter 6). Retrieved 08 01, 2021, from <http://www.urkesh.org/pages/312i.htm>
- Creswell, John W. (2007) *Qualitative inquiry & research design choosing among five approaches*. Sage Publication Inc
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (4th ed.)*. MA: Pearson.
- Fajar, S. (2009). *The difficulties faced by students in reading comprehension section of national examination*. (Unpublished). Syiah Kuala University.
- Frima, R. N., & Putri, M. E. (2022). A study on students' digital literacy in reading comprehension at sman 5 pekanbaru. *Jurnal Kependidikan DISCOVERY* , 53-66.
- Iftanti, E. (2015). Investigating inspiring english lecturers in a faith-based educational institution: efl learners' perception. *Investigating Inspiring English Lecturers*. 343-358.
- Lim, F. V. & Toh, W. (2020). How to teach digital reading?. *Journal of Information Literacy*, 14(2), pp. 24-43.
- Mardiah, R. Melati. & Safitri, T., N. (2022). Academic purposes digital reading. *Proceedings of the Fifth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2021)*, 562-567.
- Marsiyah (2009). *Increasing students' reading comprehension of narrative text through sq3r technique*. Unpublished script.
- Miles, M. B., & Huberman, A. M. (1984). *Qualitative data analysis*. Sage.
- Rachmanita., Saptarina, E. & Amelia, T. (2022). An analysis of students' difficulties in reading comprehension through online learning. *Journal of Linguistics and Language Teaching*, 258.
- Satriani, E. (2018). Reading comprehension difficulties encountered by english students of universitas islam riau. *Journal of English for Academic*, 15-26.
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif dan r&d*, Cetakan ke-24. Alfabeta.
- Utimidini, N. J. (2021). Efl students' challenges to read online. *Jurnal Pendidikan Bahasa* , 280-287.